POPULATION BULLETIN

POPULATION REFERENCE BUREAU

Volume III DECEMBER 1947 Number 3

Can America Support a Multiplying Europe?

In spite of the great loss of human lives in Europe caused by World War II, the population there increased 14,000,000 during the last ten years.[1]

Although millions of Europeans are on the edge of starvation today, the population of Europe is now increasing faster than before World War II—and it is expected to increase 22,000,000 more during the coming ten years.[2]

While Europe had only one acre of cultivated land per person before World War II compared with three acres in the United States,[3] today many European countries are giving bonuses for larger families.

Most of the 16 countries to receive aid through the Marshall plan have sharply increased their birth rates since the beginning of the war. For instance, the birth rate of the United Kingdom increased from 15 to 20 per 1000 population between 1939 and 1946.[4]

The 16 European countries have a total population of about 219,000,000 (see table, p. 27), and during 1946 alone the baby crop of these countries totaled more than 4,710,000 births.[5]

Food Costs of 1946 Births

In attempting to study objectively programs that will be of lasting value to both the United States and the countries to receive aid, the effect of number of births on Europe's food needs should be carefully considered in connection with America's measurable reserves of natural resources such as top soil, forests, and strategic minerals.

There is no question of the relative value of human beings versus top soil, but it should be remembered that the lives of human beings in the future will be dependent upon natural resources just as they are today. With this in mind it is important to have a quantitative estimate of the effect of the increasing number of European births upon basic supplies.

In 1946 the Marshall plan countries are recorded to have had 4,710,000 births and 312,000 infant deaths. The food requirements of

the infants who died during the first year of life are not included in this study.

To estimate how much food will be required for the 4,398,000 babies who survive to age one and subsequent ages is not easy. For health they will require milk, vegetables, and animal products. Such foods will cost more in terms of natural resources and human labor than does the same amount of energy in grains.

In this study we have not attempted to go into the complex factors of costly foods. For an irreducible minimum we have taken the calory requirements and expressed them in terms of wheat, one of the cheapest and most easily transportable foods.

Authorities on nutrition of the National Research Council recommend 1,000 calories per day for a one-year-old baby. These authorities suggest about 800 calories for a minimum diet.

Assuming that it takes about 800 calories a day to support a one-year-old baby and that European countries extract about 82,000 calories from a bushel of wheat, it would take about 3.56 bushels of wheat to feed a one-year-old baby at a minimum diet for one year.

Using these conservative assumptions, the 1946 crop of European babies (less infant deaths) in the 16 countries considered by the Marshall plan would require a minimum of about 15,655,880 bushels of wheat per year. This would cost at recent prices ($2.75 per bushel) about $43,053,670. The cost of deterioration, transportation, storage, and distribution should be added.

Assuming a production of 17 bushels of wheat to the acre in the United States (average for six-year period 1940-45), it would require about 920,916 acres of American crop land to supply the calories to feed for one year the 1946 production of babies in the European countries included in the Marshall plan. This is about as much crop land as in the state of New Jersey.

Increasing Food Needs

Children cannot be expected to support themselves until they are at least 15 years old, and their calory requirements increase every year. By the time a boy reaches 15 he needs a minimum of 2,200 calories per day. Besides this growing demand, there is a new baby crop each year that must be added to those of preceding years.

The National Research Council estimates that a child aged two to three years should have 1,200 calories. In our study we have assumed minimum requirements of 900 calories for two-to-three-year-

olds, 1,120 for four-to-six-year-olds.

By 1951, the fourth year of the Marshall plan (if in the intervening years the baby crops are the same as that of 1946), the total number of children born since 1945 would require about 308,800,000 bushels of wheat. This is more than half as much as America is expected to send to Europe this year. At recent prices this would cost more than $849,200,000, and would require 18,200,000 acres of American crop land. This amount is more than twice as much crop land as in the state of California.

After the Marshall Plan, What?

In this bulletin we are not arguing for or against the Marshall plan. Personally this writer is in favor of that plan or something similar to it. But regardless of personal sympathies, the facts and consequences of increasing population and decreasing natural resources, both in Europe and the United States, must be studied objectively.

It will be noted from the table on page 27 that the Marshall plan countries had a net increase, births over deaths, of more than 2 million in 1946. This net increase should not be confused with the total number of births of the Marshall plan countries.

One question might be asked: How is the increasing population of Europe to support itself on a democratic basis after the Marshall plan expires at the end of 1951?

Even before World War II the industrial countries of Europe imported nearly one-third of their wheat, and, as already has been mentioned, Europe as a whole had only 1.1 acres of cultivated land per capita. It is estimated by nutritionists that 2.5 acres per capita of arable land is needed to produce a minimum adequate diet.

Europe's large increase in population during the past 150 years was made possible chiefly by her head start on the rest of the world in industrialization. This temporary advantage made it possible for European countries to trade their manufactured products for the natural resources and raw materials of the New World countries.

Today other countries have learned the techniques of industrialization, especially the United States, and with their greater natural wealth per person they have left Europe in a condition in which she cannot adequately support her dense population either by industrialization or by agriculture. Even the coal which the United Kingdom depended upon to run her industries has been depleted to such an extent that the trend in production has been downward since before World War I.

Loans to Europe Are Not Paper Dollars

It is being increasingly realized by the American people that the billions of dollars that the United States has spent upon Lend-Lease and relief in foreign lands are not just so many paper dollars, but represent tons of American top soil, vast quantities of mineral resources, forests, and the water reserves and wildlife.

The U. S. Soil Conservation Service, the Forest Service, and the Bureau of Mines have repeatedly shown that regarding natural resources even the United States is not operating on a "permanent" basis. The evidence available from both government and private scientific agencies demonstrates that the American people are spending their "capital" of real wealth instead of living on the "interest."

It is hoped that the United States will be able to support the Marshall plan without creating perilous inflation for the present generation or without depleting the essential natural resources which will be needed by America's children and grandchildren. But if more than one such plan is required the United States might be faced with the choice of saving Europe's babies or America's babies of the future.

High Production Not Reliable Measure of Our Real Wealth

In making a study of America's natural resources, present production of food, machines, clothes, and houses should not be taken as reliable measures of America's real wealth.

Our emergency food production since the beginning of World War II, like during World War I, was a great deal larger than during times of peace. But because of this we know that the top soil which is the basis of food production in the future is being lost at a truly alarming rate.

In 1939 Dr. Hugh H. Bennett, Chief, U. S. Soil Conservation Service, testified before a congressional committee that we did not have enough good land left in the United States.[6] And, only a few days ago, Secretary of Agriculture Anderson warned: "We continue to drain our soil fertility by using much of our land too intensively, not taking time in our crop rotation for enough grass and legumes, even plowing land in the plains that is sure to blow away in dust storms."[7]

Authorities in the U. S. Bureau of Mines also know that our present great "production" of minerals, which has permitted 7 percent of

the world's population living in the United States to produce 40 percent of the world's goods, has decreased our known and measurable reserves of mineral resources to the danger point. The Annual Report of the Secretary of Interior, 1945, says that "it behooves us to learn the true meaning of our meager supply, which is not that we shall be weak in a hundred years, but that we are relatively weak now."

True, we are "producing" great quantities of minerals (that is, we are digging them out of our land faster with our new machines) but, says Dr. Elmer W. Pehrson, Chief, Economics and Statistics Branch, Bureau of Mines, "it follows that the faster we grow in industrial strength and military potency . . . the faster we liquidate the very basis of our power."[8]

Incidentally, our new techniques have not enabled us to keep pace with earlier rates of discovering new mineral reserves.

The same story may be told about our forests and our wildlife. Between 1909 and 1938, a period of only 30 years, our standing saw timber was reduced 40 per cent, and in 1943 timber cut or destroyed was 50 per cent more than total growth.

Many of us do not realize how much of our nation is built of wood. For instance, of the 28 million homes in this country 23 million are built of wood. Many also imagine that its use can easily be replaced by new plastics and synthetics, but, says Lyle F. Watts, Chief, U. S. Forest Service, "Wood itself is the raw material for many of the most startling new plastics and synthetics."[9]

Other plastics and synthetics are the products of raw materials from the soil. And progress in this direction, says the Chief of the Soil Conservation Service, will create additional demands on the land.[10]

There seems to be little doubt that science will be able to increase the over-all amount of goods if we can conserve our basic natural resources. Whether the United States will be able to create a permanently favorable relationship between number of people and natural resources will depend largely upon the demands made upon its soil, forests, and mineral resources by population.

A Possible Way Out

While European population has increased 14 million in ten years, the population of the U. S. has increased 12 million in the last seven years. In 1946 the population of the Marshall plan countries increased 2,035,000, and the population of the U. S. increased a record of 2,279,000 — including 251,000 foreign immigrants.

Such large population increases have made it necessary for the U.S. to exploit its reserves of real wealth at a rate which is clearly endangering the future welfare of the American people and all peoples who look to us for aid.

While neither the United States nor the European countries can now escape the problems of population pressure upon reserves of real wealth, they can make these problems less difficult to solve. They can do this by a determined effort to stabilize the quantity and to improve the quality of their populations. The former will help relieve pressure on diminishing natural resources, and the latter will increase the possibilities of finding new methods of solving the population-resources problem.

It has been said that if the countries of Western Europe and the United States stabilize their populations they will be swamped by the teeming millions from Asia. The evidence available to this writer does not support that conclusion.

First, if mere quantity of population without adequate natural resources determined a nation's strength, China or India would have long since conquered the world.

Second, a cradle race between the peoples of Western Civilization and the peoples of Asia would prove hopeless as well as disastrous for Europe and the United States.

Third, in both World War I and World War II, it was America's *surplus* of raw materials and industrial production above that needed to support her population that turned the tide of battle and saved millions from famine after the wars.

The Krug report, *Natural Resources and Foreign Aid,* has made it clear that unless the United States itself soon can stabilize its population and conserve its natural resources, this country will have few surpluses to win wars and feed starving nations.

For her own good, Europe should lose no time in trying to establish a favorable ratio of population to resources before the time when the U. S. can no longer underwrite her material deficits.

There are, of course, two ways a country might establish a favorable ratio between number of people and resources. One way is to increase the resources, and the other is to decrease the population.

In the past it has been the policy for nations to try to increase the resources faster than the population. It's the old race between the tortoise and the hare. Of course, technology makes some big jumps, but population increase is the plodding ever-moving tortoise that wins the race.

In conclusion it should be emphasized that Russia and Eastern

1946 POPULATION FIGURES FOR THE SIXTEEN NATIONS TO RECEIVE AID THROUGH THE MARSHALL PLAN

Country	Total Population (a)	Number of Births (b)	Number of Deaths (b)	Births over Deaths (b)
Austria	7,055,000	111,300	94,100	17,200
Belgium	8,400,000	152,000	112,000	40,000
Denmark	4,330,000	96,100	42,000	54,100
France	41,100,000	834,500	542,000	292,500
Greece	7,700,000	200,200 (c)	109,300 (c)	90,900 (c)
Iceland	130,000			
Ireland	2,955,000	67,500	41,500	26,000
Italy	46,000,000	1,022,700	541,600	481,100
Luxembourg	300,000			
Netherlands	9,530,000	284,000	80,000	204,000
Norway	3,065,000	69,900	28,600	41,300
Portugal	8,275,000	203,000	120,700	82,300
Sweden	6,750,000	131,500	71,100	60,400
Switzerland	4,485,000	89,100	50,200	38,900
Turkey	19,100,000	494,000 (c)	268,800 (c)	225,200 (c)
United Kingdom	49,700,000	954,400	573,000	381,400
TOTAL	218,875,000	4,710,200	2,674,900	2,035,300

(a) Source: "World Population Estimates," OIR Report No. 4192, March 1, 1947, Department of State, pp. 14-20.

(b) Source: "Monthly Bulletin of Statistics," Statistical Office of the United Nations, August 1947, pp. 1-7 and 12-14.

(c) Greece's 1936-40 birth rate (26.0) and death rate (14.2) were used to compute the number of births and deaths for both Greece and Turkey. Source: *Population Index*, July 1946, School of Public Affairs, Princeton University, pp. 237-239.

Europe need to control their higher birth rates even more than do the United States and Western Europe, and that any program to decrease population should include a careful study of future age distribution.

—Guy Irving Burch, *Editor.*

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